

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for determining a proteasome inhibition bortezomib therapy regimen for treating a liquid tumor in a patient comprising:
 - a) selecting features from the Predictive Markers in Table 1 to select a predictive marker set;
 - b) determining the level of expression of at least one Predictive marker the features in the predictive marker set; and
 - c) determining a proteasome inhibition-based bortezomib regimen for treating the tumor based on the expression of the predictive marker features in the predictive marker set, wherein a significant expression level is indicative that the patient is either a responsive patient or a non-responsive patient.
2. (Currently Amended) The method of claim 1 wherein the level of expression of the predictive marker features in the predictive marker set is determined by detection of mRNA.
3. Canceled
4. (Currently Amended) The method of claim 1 wherein the predictive marker features in the predictive marker set are selected from at least one of the markers identified in any of Table 1, Table 2, Table 3, Table 4 Table 5, Table 6, or Table 7 as having a rank under 100.
5. (Original) The method of claim 1 wherein determining the significant level of expression is determined by comparison with a control marker or by comparison to a predetermined standard.
6. Canceled
7. (Original) The method of claim 1 wherein the liquid tumor is selected from the group consisting of myelomas, multiple myeloma, Non-Hodgkins Lymphoma, B-cell lymphomas, Waldenstrom's syndrome, chronic lymphocytic leukemia, and other leukemias.

8. Canceled

9. Canceled

10. (Original) The method of claim 1, wherein the patient sample comprising tumor cells is obtained from the subject any time selected from prior to tumor therapy, concurrently with tumor therapy or after tumor therapy.

11. – 24. Canceled

23. 25. (Currently Amended) A kit for determining a ~~proteasome inhibition~~ bortezomib therapy for treating a tumor in a patient comprising reagents for assessing the expression of ~~at least one~~ the predictive marker set of claim 1, and instructions for use.

24.26. (Currently Amended) The kit of claim 23 25 wherein the reagents comprise ~~one~~ ~~or~~ a plurality of nucleic acid probes, wherein the ~~probe~~ probes specifically bind features in the ~~binds at least one~~ predictive marker set.

25.27. – 26.28. Canceled

29. (New) The method of claim 1, wherein the predictive marker set is selected by the Signal-to-Noise Ratio method.

30. (New) The method of claim 1, wherein the predictive marker set is selected by the Class-Based Threshold method.

31. (New) The method of claim 1, wherein the predictive marker set identifies a responsive patient.

32. (New) The method of claim 1, wherein the predictive marker set identifies a non-responsive patient.

33. (New) The method of claim 1, wherein the method selects a predictive marker set selected from the group consisting of Table 4, Table 5 and Table 6.

34. (New) A method for determining a proteasome inhibition therapy regimen for treating a tumor in a patient comprising:

- a) determining the level of expression of Predictive marker No. 149; and
- b) determining a proteasome inhibition-based regimen for treating the tumor based on the expression of the predictive marker, wherein a significant expression level is indicative that the patient is either a responsive patient or a non-responsive patient.

35. (New) The method of claim 34 wherein the level of expression of the Predictive Marker No. 149 is determined by detection of mRNA.

36. (New) The method of claim 34, wherein the proteasome inhibition-based regimen for treating the tumor comprises treatment with bortezomib.

37. (New) The method of claim 34, wherein the tumor is selected from liquid or solid tumors.

38. (New) The method of claim 34, wherein the liquid tumor is selected from the group consisting of myelomas, multiple myeloma, Non-Hodgkins Lymphoma, B-cell lymphomas, Waldenstrom's syndrome, chronic lymphocytic leukemia, and other leukemias.

39. (New) The method of claim 38, wherein the liquid tumor is multiple myeloma.

40. (New) A kit for determining a proteasome inhibition therapy for treating a tumor in a patient comprising reagents for assessing the expression of Predictive Marker No. 149, and instructions for use.

41. (New) The kit of claim 40, wherein the reagents comprise one or a plurality of nucleic acid probes, wherein the probe specifically binds to Predictive Marker 149.